STARRDIT UPDATE – SEPTEMBER 2020

Introduction

Hello – it's time to share an update on STARDIT with you all and ask for feedback. Please note that this is a chance to give some **preliminary feedback** on some aspects of STARDIT and there will be more formal opportunities. We've also included a plain English summary as a refresher to STARDIT.

Contents

Update

- **Working Online STARDIT** form (Beta proof of concept)– this is currently being built and we hope to have a demonstration version ready for the publication of the Beta Version
- **Logo** – we've been working with a graphic designer who has come up with some options for the STARDIT logo – you can have a vote on your favourite logo here.
- **Beta version paper** – We're sending the Beta version of STARDIT to professional editor in order to help improve it, before asking for everyone to add comments. The current version is over 5K words, with an enormous supplementary section and we want to share something more polished.
- **STARDIT already cited** – the Alpha version has been cited by this paper as a way of reporting involvement in biobanks.

Ready for feedback

1. **Most important** - The main part of STARDIT is the data reporting fields – which are below and ready for feedback. **Is anything missing or unclear?**
2. **Moderately important** - A table which summarises some of the ways STARDIT can be used – **is it clear, is anything missing or can this be improved?**
3. **Perhaps of interest** - We've also created a summary of different standards, articles and other data sources which have informed the development of STARDIT (which will be supplemented by a scoping review). Do get in touch if you'd like to be on the author team of the scoping review! It's still a work in progress and we'll share a draft ASAP

How to give feedback

You can give feedback by:

- Commenting or suggesting edits on this google doc (other will be able to see these comments and edits)
- Commenting on the Loomio post where this was shared
- Emailing Jack.Nunn@Scienceforall.World

Please contact Jack.Nunn@Scienceforall.World if you would prefer to work on a Word version.

Plain English Summary

STARDIT stands for Standardised Data on Initiatives, a working platform for a standardised way to describe the who, how, what and any impacts of initiatives such as research, policy, educational interventions, international development programs and more. This article outlines how STARDIT works, and how development might continue across countries, disciplines and by multiple organisations.

Too often, information about initiatives and their impacts is not consistently reported across disciplines, or even across departments. STARDIT is being co-designed by people from multiple disciplines and organisations around the world, to create a standardised way to share information about initiatives.

By standardising how data is reported, comparisons of the effectiveness of different methods can be made. For example, comparing education initiatives for the most measurable impact on public health.

STARDIT creates a standardised way to share information about which tasks were done, who completed the tasks, which people or organisations were involved and any impacts made. It also offers a way to add updates throughout the lifetime of an initiative, from planning to evaluation. STARDIT can be used across sectors including health, environment, education, manufacturing, food production and international development.

STARDIT reports will be available open access in the public domain, with options for peer-review and verification of authorship. The data is presented in a way that is accessible to anyone. Data is in STARDIT reports structured to allow for translation into multiple languages, and increase reach across countries and communities.

All information about the project is available free of charge under a Creative Commons licence. The project is currently hosted by the WikiJournals on Wikimedia Foundation servers. The co-creation process is being supported pro-bono by the charity 'Science for All' and has received in kind support from the EPPI-Centre. STARDIT is a truly collaborative project and in the Beta phase of development; the co-creators invite anyone in the world to get involved.

STARDIT data reporting fields

Below are the full STARDIT data reporting fields for the Beta version. Please note there is also a Minimum Contribution Reporting Form (STARDIT-MICRO) – noting that the full table is more data than most people would complete. In the future we will ideally only be adding more data fields, not removing any (so it is future-proofed) so it's important we make sure these are well thought-through at this stage.

If you want to see some examples of completed STARDIT reports already in the public domain (Alpha version) they can be found as supplementary resources from this pre-print and this pre-print (direct links to PDF STARDIT reports here and here).

The main idea is that people can complete STARDIT as an online form, the free text will be stored on Wikimedia servers and certain words will be 'meta-tagged' as WikiData words. For example, the Wikidata entry for 'patient' defines it as a 'person who takes a medical treatment or is subject of a case study'[1] This entry is assigned a code and will be automatically translated into 54 other languages. Similarly, the terms 'participant' and 'research participant' have codes, but people may wish to create new categories, such as 'biobank participant'. This will be an ongoing process facilitated by the current WikiData infrastructure, and may require creating additional tool to create more inclusive ways of involving people in developing taxonomies[2].

STARDIT has been designed so it can align with other data standards, but creating new data fields and mapping them to those.

Standardised Data on Initiatives – Beta Version

Section	Data category	Data field	
Initiative context - This information locates the initiative within a clear context.	Identifying information	Initiative name	
		Geographic location or scope	
		Date range (planned start and end dates of initiative)	
		Purpose of the initiative (aims, objectives, goals)	
		Organisations or other initiatives involved (list all if multi-centre)	
		Funding sources (link to public domain URL if possible)	
		Clinical trial registration details (if applicable)	
		Ethics approval (if applicable)	
		Other relevant information (free text)	
		Relevant URLs/URIs*	
		Link:	Description:
		Other relevant information (free text)	

		RAiD (API) - identifier for research activities (if applicable)
		Keywords or metatags – including relevant search headings (e.g. Medical Subject Headings - MeSH)
	Stage or state of initiative	At which stage of the initiative or research project has this report been written? (Select from: 1. **Before** the initiative– this report is prospective or describes planned activity 2. **Ongoing** – the initiative is still taking place 3. **After** the research project or initiative has occurred
	Methods	Methods of the initiative (what is planned to be done, or is being reported as done). If appropriate, include a link to a public domain document.
		Include any information about theoretical or conceptual models or relevant 'values' of people involved with this initiative.
Report authorship – Information about who completed the report and how	Identifying information for each author (authors can be anonymised in the public report but identities will need to be sent to WikiJournal Editors to attempt to prevent falsified reports)	Name
		Public domain profiles, institutional pages
		Open Researcher and Contributor ID (orcid.org)
		Tasks in report completion
		Other information
	Accountability	Key contact at initiative for confirming report content (include institutional email address)
	Date	Date of report authorship
Involvement in initiative Who is involved in this initiative and how?	Details about how each group or individual was involved in the initiative	Who was involved or how would you label those involved (select from group labels or submit new group label name in free-text) *You can name individuals or use 'labels' to describe groups of people such as 'professional researchers' or 'service users'. Additional 'labels' or 'meta-tags' to describe people may be added if appropriate.*

Editors assessing involvement may need to use the STARDIT 'Indicators of involvement' tool		How many people were in each grouping label?
		Specific tasks of this person or group (list as many as possible) – *including any information about why certain people were included or excluded in certain tasks*
		How were these people involved (what methods were used)
		Who is involved in analysing the data? (align with terms used to describe who is involved)
	Involvement appraisal	Methods of appraising and analysing involvement (assessing rigour, deciding outcome measures, data collection and analysis)
		Facilitators of involvement (what do you expect will help these people get involved – or what helped them get involved)
		Barriers of involvement (what do you expect will inhibit these people from getting involved – or what inhibited them from getting involved). Are there any known equity issues which may contribute?
		What was the outcome or output of the involvement of these people? What changed as a result of involving people? Were there any impacts?
	Stage	Which stage of the initiative were these people involved? (select from list of pre-defined stages or allow 'other')
	Cost and time	What was the estimated financial cost for involving people. How much time did it take. Were there any costs that cannot be measured financially?
	Learning points	What worked well, what could have been improved? Was anything learned from the process of involving these people?
	Costs	What was the estimated financial cost for the initiative. How much time did it take. Were there any

Mapping financial or other 'interests'		costs that cannot be measured financially (e.g volunteer time)?
	Financial or other interests	Describe any financial relationship or other interests anyone involved with this project might have
		Describe any conflicting or competing interests (including any relevant information about authors of this report)
Data	Hosting and storage	Who is the data from this initiative shared with?
		How is it stored and hosted?
	Analysis	Who is involved in analysing the data? (align with terms used to describe who is involved)
		What methods will be used to analyse the data (including a link to any relevant code and information about validity)
	Dissemination	How is information about this data disseminated?
	Ownership and control	Who 'owns' the data or claims any kind of 'intellectual property' or rights (include relevant licensing information)
		Who controls access to the data
	Management and quality	Who manages (or 'curates') the data?
		Who is accountable for ensuring the quality and integrity of the data? (this may be an individual or organisation)
	FAIR criteria[3]	How is/will the data be 'Findable, Accessible, Interoperable, Reusable' according to the FAIR criteria? (provide a link to a public domain URL if appropriate)
Impacts and outcomes	What was learned	What new knowledge has been generated? (if appropriate, include effect size, relevant statistics and level or evidence)
	Knowledge translation	Describe how the learning or knowledge generated from this initiative has or will be used
	Outcomes	Has anything changed or happened as a result of this initiative that isn't captured in previous answers?
	Measurement	How has or how will this be measured?
		Who is involved in measuring this?

Information completed by reviewers		
STARDIT report version number (assigned)		Report number assigned to distinguish it from any future updated reports
Indicators *completed by Editors and/or peer reviewers* Editors and peer reviewers assessing the report will need to look for indicators in the following categories on public domain URLs*	Indicators of involvement	Use the STARDIT 'Indicators of involvement' tool
	Indicators of FAIR	Use the FAIR criteria[3]
	Indicators of translation and impact	
	Other indicators	

*All URLs will be automatically added to the Internet Archive upon submission of the form to future-proof reports from changed or broken links

Minimum Contribution Reporting Form (STARDIT-MICRO) – Beta Version

Section	Data category	Data field
Initiative context - This information locates the initiative within a clear context.	Identifying information	Initiative name
		Geographic location or scope
		Purpose of the initiative
		Organisations or other initiatives involved
		Ethics approval (if applicable)
		Funding sources
	Stage or state of initiative	At which stage of the research project has this report been written? (Select from: 1. **Before** the intervention or initiative– this report is prospective or describes planned activity 2. **Ongoing** – the intervention or initiative is still taking place 3. **After** the research project or initiative has occurred
		Methods of the initiative (what is planned to be done, or is being reported as done)
Report authorship – Information about	Identifying information for each author	Name
		Public domain profiles, institutional pages

who completed the report and how		Open Researcher and Contributor ID (orcid.org)
	Accountability	Key contact at initiative for confirming report content
Involvement in initiative Who is involved in this initiative and how? Editors assessing involvement may need to use the STARDIT 'Indicators of involvement' tool	Details about how each group or individual was involved in the initiative	Who was involved (select from groups or submit new group name in free-text)
		Specific tasks of this person or group (list as many as possible) - for example, 'co-creating outcome measures'
	Outcomes and outputs	What was the outcome or output of the involvement of these people?
Mapping financial or other 'interests'	Financial or other interests	Describe any financial relationship or other interest this person has to this project
		Describe any conflicting or competing interests
Research data	Hosting and storage	Who is the data from this intervention shared with?
		How is it stored and hosted?
	Dissemination	How is information about this data disseminated?
	FAIR criteria[3]	How is/will the data be 'Findable, Accessible, Interoperable, Reusable' according to the FAIR criteria?
Impacts and outcomes	What was learned	What new knowledge has been generated? (if appropriate, include effect size, relevant statistics and level or evidence)
	Outcomes	Has anything changed or happened as a result of this initiative that isn't captured in previous answers?

Potential applications of STARDIT

Area	Sub-Area	Potential reporting application
Research	**Health research**	**Reporting:** Funding, conflicting or competing interests, co-design, experts involved, people affected involved, methods, process for deciding and measuring outcomes, protocols, who is accountable for ensuring protocol is followed, information about data storage, sharing and ownership, information about data security practices and standards, information about consent and withdrawal processes evaluation of entire research process.
	Social research	
	Genomics research	
	Environmental research	
Policy	**Health and social policy**	**Reporting:** Values of people involved, sources of data and evidence, process for policy (or proposed policy) creation, process for deciding and measuring outcomes, experts involved, people affected involved, policy or manifesto writers, conflicting or competing interests of people involved, purpose of policy (what needs have been identified, how and by who), outcomes from policy (including outcomes measured by those affected by policy), policy evaluation (reporting if it achieved what was intended)
	Other government policy (transport, arts, education etc)	
	Foreign policy	
	Proposed policy (manifestoes)	
	International development	
Education and learning	**Educational interventions**	**Reporting:** Sources of data and evidence for intervention, purpose of intervention, process for educational intervention creation, funding, conflicting or competing interests, experts involved, people affected involved, conflicting or competing interests, process for deciding and measuring outcomes, outcomes from intervention, evaluation of intervention
Arts	**Community arts projects**	**Reporting:** Purpose of project, process for project design and implementation, experts involved, people from communities intended to benefit involved, funding, conflicting or competing interests, process for evaluating project, project evaluation
	Arts funding	**Reporting:** People involved in deciding funding process, purpose of funding, people allocating funding (funding sources), conflicting or competing interests, process for deciding outcomes of funding, evaluating the funding allocation process
Information, media and	**Health and medical information**	**Reporting:** People involved in researching, writing (including medical writers), creating, reviewing (including

cultural heritage	**Disaster and emergency communication**	peer reviewers), disseminating and funding, information about any potential risks (to human health or lifeforms, natural or cultural heritage), information about who assessed those risks and how (for example, medical information standards[4]), information about consent to appear in images and verified appearances of public figures, evaluating knowledge translation, reporting impacts and outcomes[5].
	Public interest, factual information commentary, documentaries and other informative media	
	Traditional and Indigenous knowledge and wisdom	**Reporting:** who created any content containing the Indigenous or traditional knowledge, what tasks they had, how this knowledge was shared and any relevant concepts of 'owning' or 'property'; reporting who knows certain things (for example, people who are recognised as 'Preservers of Important Intangible Cultural Properties'[6]); reporting who is recognised as an Elder, community leader, Indigenous elders or leaders (and by who); reporting who does or does not have permission to verify, share, redact or edit content (including stories, beliefs and medicine); information about any potential risks (to human health or lifeforms, natural or cultural heritage); information about who assessed those risks and how, reporting impacts and outcomes from dissemination[5].
Evaluation	**Process evaluation**	**Reporting**: data about processes (industrial, organisational) and compare outcomes
	Evaluation of participatory methods (co-design)	**Reporting:** data about participatory research methods and compare outcomes
	Transparent rating	**Reporting:** Processes of transparently rating (or 'scoring') data quality about initiatives based on how much information about the initiatives is shared in the public domain.
Consumerism and business	**Industry standards**	**Reporting:** Internal processes and data sharing practices of self-regulating industry standards (for example, the Forest Stewardship Council, Marine Stewardship Council[7] and Certified B Corporations[8]), data sharing principles, process evaluation (including by those affected).
	Eco-tourism	**Reporting:** Transparent process for defining 'eco-tourism', experts involved, people affected involved, process for deciding and measuring outcomes, outcome measures, evaluation of process
	Construction and interiors	**Reporting:** Transparent reporting of sources of building and furniture materials, such as wood (including relevant DNA information to verify sources of timber)

	Finance and financial services	**Reporting:** who is involved in decision making (including investment and divestment), who scrutinises decision making, who is involved in holding individuals to account and who scrutinises this process, competing or conflicting interests of people involved in decision making, data about how concepts such as 'ethical investments' are defined, impacts or outcomes from investments or donations, data sharing practices and security practices, data about who scrutinises security practices.
	Other products (medical devices, electronics)	**Reporting:** Experts involved in production, other people involved in production process, resources involved in production process (including relevant DNA information to verify products from plants, animals and fungi), funding for resources (for example demonstrating it is 'slavery free'), process reporting (including Good Manufacturing Practice), process for designing impact assessment, impact assessment (including human and environmental), experts involved in dismantling process (including recycling), other people involved in dismantling process and disposal, evaluation of product according to co-created outcome measures
Products for human ingestion	**Food**	
	Medicines	
Health Technology assessment	**Assessment process for pharmaceuticals, devices, procedures and organisational systems used in health care**	**Reporting:** Process for deciding health technology assessment (oversight and scrutiny), sources of data and evidence, process for deciding and measuring outcomes, experts involved, people affected involved, conflicting or competing interests, outcomes from assessment decisions (including outcomes measured by those affected by assessment decisions), assessment evaluation (did it achieve what was intended?)

References

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4.   Turki H, Shafee T, Hadj Taieb MA, et al. Wikidata: A large-scale collaborative ontological
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8.   B Lab. Certified B Corporations.
        https://web.archive.org/web/20200421033526/https://bcorporation.net/. Published 2020.